

THAT WHICH IS CLAIMED IS:

1. A method of simulating network traffic, comprising:  
filtering simulated network traffic utilizing known Ramsey numbers so as  
to provide a first predefined number of related messages and a second predefined  
5 number of unrelated messages.
2. The method of Claim 1, wherein the first predefined number of  
related messages simulate buy messages wherein the second predefined number of  
unrelated messages simulate browse messages
- 10 3. The method of Claim 2, wherein the first predefined number  
comprises a clique of order  $m$  specified by a selected known Ramsey number and  
the second predefined number comprises an independent set of order  $n$  specified by  
the known Ramsey number.
- 15 4. The method of Claim 3, further comprising the step of generating  
the simulated network traffic so as to provide a bundle of messages corresponding  
to the selected known Ramsey number.
- 20 5. The method of Claim 4, wherein the step of filtering comprises the  
steps of:  
selecting  $m$  related messages from the bundle of messages corresponding to  
the selected known Ramsey number; and  
selecting  $n$  unrelated messages from the bundle of messages.
- 25 6. The method of Claim 5, further comprising the steps of:  
ordering the selected  $m$  related messages;  
chaining the selected  $m$  related messages; and  
streaming the  $m$  related messages and the  $n$  unrelated messages so as to  
30 provide pseudo-Internet traffic having buy and browse messages.



7. The method of Claim 5, further comprising the steps of:  
monitoring the selection of the  $m$  related and the  $n$  unrelated messages to  
determine if the bundle of messages provides both the  $m$  related messages and the  
 $n$  unrelated messages; and
- 5 modifying the generation of the bundles of messages if monitoring the  
selection indicates that the bundle of messages fails to provide both the  $m$  related  
messages and the  $n$  unrelated messages.

8. The method of Claim 7, wherein the step of generating simulated  
10 network traffic comprises the step of generating simulated network traffic utilizing  
a plurality of non-linear functions and wherein the step of modifying the generation  
of the bundle of messages comprises the step of adding at least one additional non-  
linear function to the plurality of non-linear functions.

- 15 9. The method of Claim 7, wherein the step of monitoring comprises  
monitoring the selection for a plurality of bundles and wherein the step of  
modifying comprises the step of modifying the generation of the bundles of  
messages if monitoring the selection indicates that a plurality of the bundle of  
messages fails to provide both the  $m$  related messages and the  $n$  unrelated  
20 messages.

10. The method of Claim 1, wherein the known Ramsey numbers  
comprise at least one of known Ramsey numbers and Ramsey numbers known  
within bounds.

- 25 11. A system for simulating network traffic, comprising:  
means for generating simulated network traffic; and  
means for filtering the simulated network traffic utilizing known Ramsey  
numbers so as to provide a first predefined number of related messages and a  
30 second predefined number of unrelated messages.



12. The system of Claim 11, wherein the first predefined number of related messages simulate buy messages and a second predefined number of unrelated messages simulate browse messages

5 13. The system of Claim 12, wherein the first predefined number comprises a clique of order  $m$  specified by a selected known Ramsey number and the second predefined number comprises an independent set of order  $n$  specified by the known Ramsey number.

10 14. The system of Claim 13, wherein the means for generating comprises means for generating simulated network traffic so as to provide a bundle of messages corresponding to the selected known Ramsey number.

15 15. The system of Claim 14, wherein the means for filtering comprises:  
means for selecting  $m$  related messages from a bundle of messages  
corresponding to the selected known Ramsey number; and  
means for selecting  $n$  unrelated messages from the bundle of messages.

20 16. The system of Claim 15, further comprising:  
means for ordering the selected  $m$  related messages;  
means for chaining the selected  $m$  related messages; and  
means for streaming the  $m$  related messages and the  $n$  unrelated messages  
so as to provide pseudo-Internet traffic including buy and browse messages.

25 17. The system of Claim 15, further comprising:  
means for monitoring the selection of the  $m$  related and the  $n$  unrelated  
messages to determine if the bundle of messages provides both the  $m$  related  
messages and the  $n$  unrelated messages; and  
means for modifying the generation of the bundles of messages if  
30 monitoring the selection indicates that the bundle of messages fails to provide both  
the  $m$  related messages and the  $n$  unrelated messages.



18. The system of Claim 17, wherein the means for generating simulated network traffic comprises means for generating simulated network traffic utilizing a plurality of non-linear functions and wherein the means for modifying the generation of the bundle of messages comprises means for adding at least one additional non-linear function to the plurality of non-linear functions.

19. The system of Claim 17, wherein the means for monitoring comprises means for monitoring the selection for a plurality of bundles and wherein the means for modifying comprises means for modifying the generation of the bundles of messages if monitoring the selection indicates that a plurality of the bundle of messages fails to provide both the m related messages and the n unrelated messages.

20. The system of Claim 12, wherein the known Ramsey numbers comprise at least one of known Ramsey numbers and Ramsey numbers known within bounds.

21. A computer program product for simulating network traffic, comprising:  
20 a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising:  
computer readable program code which generates simulated network traffic; and  
computer readable program code which filters the simulated network traffic  
25 utilizing known Ramsey numbers so as to provide a first predefined number of related messages and a second predefined number of unrelated messages.

22. The computer program product of Claim 21, wherein the first predefined number of related messages simulate buy messages and the second predefined number of unrelated messages simulate browse messages.



23. The computer program product of Claim 22, wherein the first predefined number comprises a clique of order  $m$  specified by a selected known Ramsey number and the second predefined number comprises an independent set of order  $n$  specified by the known Ramsey number.

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24. The computer program product of Claim 23, wherein the computer readable program code which generates comprises computer readable program code which generates simulated network traffic so as to provide a bundle of messages corresponding to the selected known Ramsey number.

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25. The computer program product of Claim 24, wherein the computer readable program code which filters comprises:

computer readable program code which selects  $m$  related messages from a bundle of messages corresponding to the selected known Ramsey number; and

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computer readable program code which selects  $n$  unrelated messages from the bundle of messages.

26. The computer program product of Claim 25, further comprising:

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computer readable program code which orders the selected  $m$  related messages;

computer readable program code which chains the selected  $m$  related messages; and

computer readable program code which streams the  $m$  related messages and the  $n$  unrelated messages so as to provide pseudo-Internet traffic including buy and

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browse messages.

27. The computer program product of Claim 25, further comprising:

computer readable program code which monitors the selection of the  $m$  related and the  $n$  unrelated messages to determine if the bundle of messages

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provides both the  $m$  related messages and the  $n$  unrelated messages; and



computer readable program code which modifies the generation of the bundles of messages if monitoring the selection indicates that the bundle of messages fails to provide both the m related messages and the n unrelated messages.

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28. The computer program product of Claim 27, wherein the computer readable program code which generates simulated network traffic comprises computer readable program code which generates simulated network traffic utilizing a plurality of non-linear functions and wherein the computer readable  
10 program code which modifies the generation of the bundle of messages comprises computer readable program code which adds at least one additional non-linear function to the plurality of non-linear functions.

29. The computer program product of Claim 27, wherein the computer  
15 readable program code which monitors comprises computer readable program code which monitors the selection for a plurality of bundles and wherein the computer readable program code which modifies comprises computer readable program code which modifies the generation of the bundles of messages if monitoring the selection indicates that a plurality of the bundle of messages fails to provide both  
20 the m related messages and the n unrelated messages.

30. The computer program product of Claim 22, wherein the known Ramsey numbers comprise at least one of known Ramsey numbers and Ramsey numbers known within bounds.